

FIG. 1
(Prior Art)

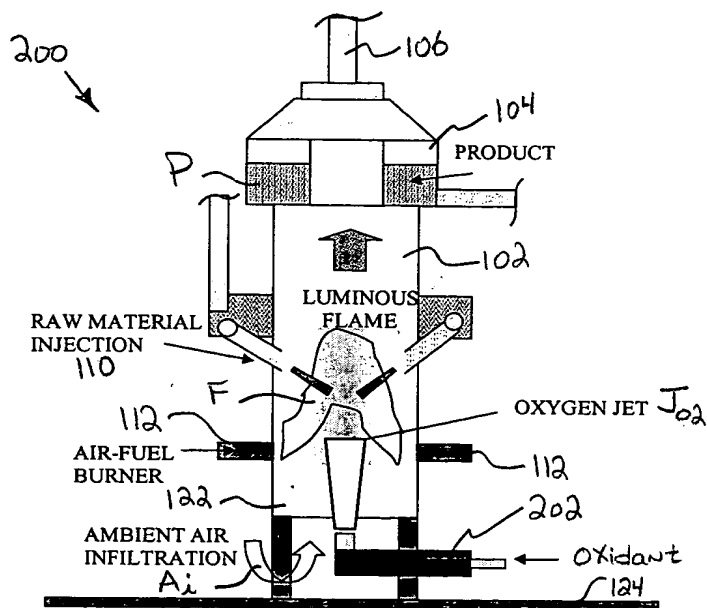


FIG. 2

A schematic diagram of a combustion system. At the top, a vertical pipe (106) leads to a chamber (104) containing a layer of 'PRODUCT'. Below this is a central vertical duct (102) with an upward arrow. Two angled pipes, labeled 'RAW MATERIAL INJECTION 110', enter the duct from the sides. Inside the duct, a 'LUMINOUS FLAME' is shown. At the bottom of the duct, an 'AIR-FUEL BURNER 112' is located. 'AMBIENT AIR INFILTRATION A_i ' is indicated by curved arrows entering the burner area. To the right of the burner, an 'OXY-FUEL FLAME' is shown, with flow rates F and F_{OF} indicated. This flame is fed by '304 oxidant' and '306 FUEL' from a source (302). A pressure symbol P is shown near the top left injection point. A large arrow labeled '300' points towards the top left of the diagram.

302

OXIDANT INLET 304

BURNER BLOCK 310

307 OXY-FUEL FLAME

306 SECONDARY FUEL INLET

308 BURNER BODY

312

FIG. 4

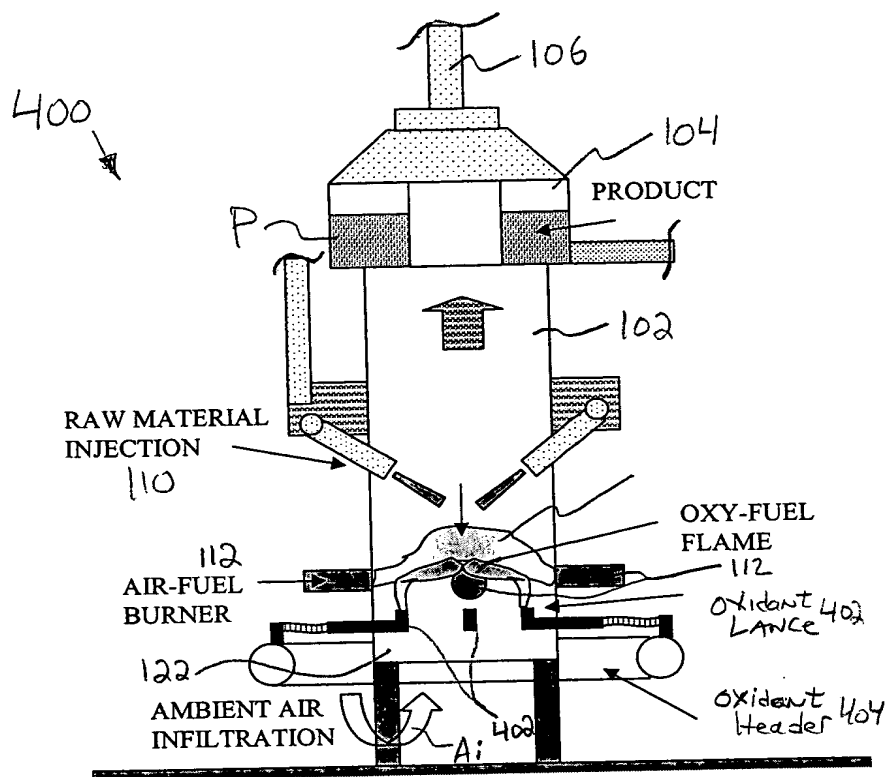


FIG. 5

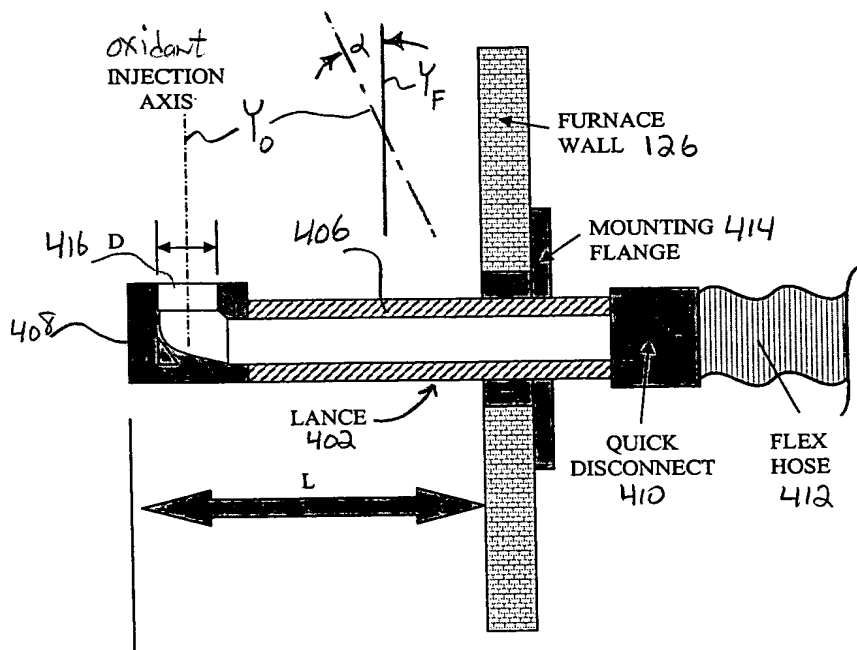


FIG. 6

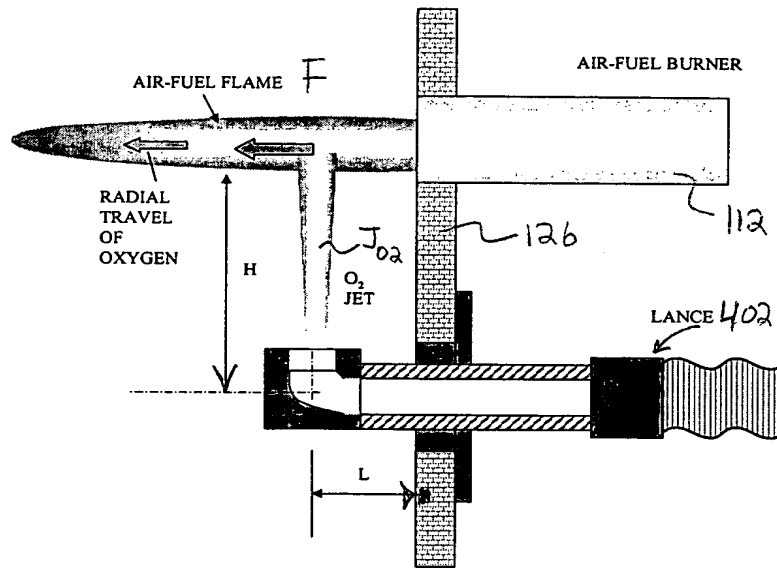


FIG. 7

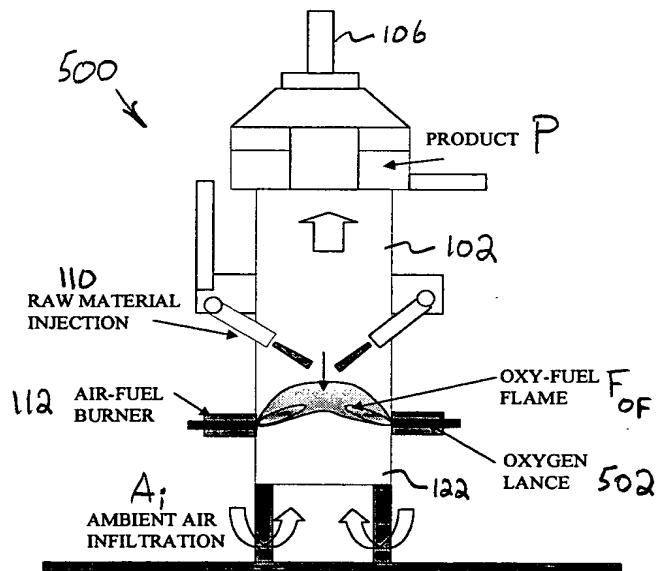


FIG. 8

FIG. 7

09584740 4394
TOP OF 0428660

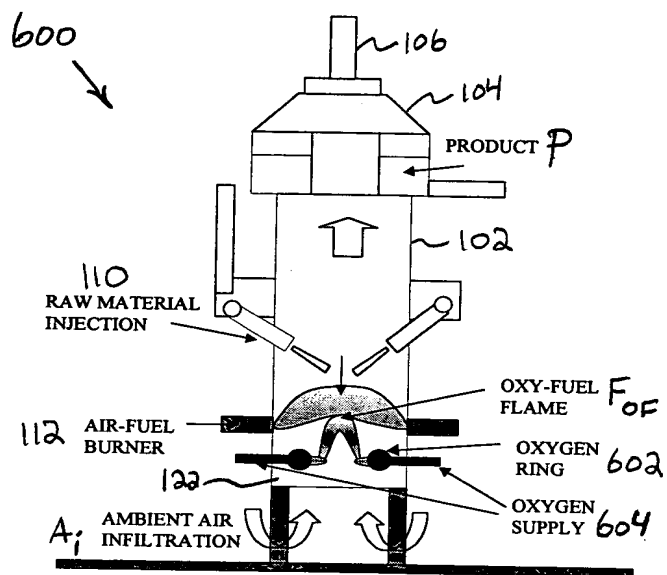


FIG. 9